A L E R T P E R I O D S
The International Space Environment Service

DECEMBER 2004

Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Rgn No.	Location Lat	Location Lon	Flares Opt	Flares M	Flares X	Date of Fcst	Region Fcst(1)	Geoadvice(1)
336	01	30	42	111	15	10706	S08	W08	0	0	0	01	Q	SOL: Eruptive
						10707	S14	W12	0	0	0	01	Q	MAG: Active
						10708	N11	E27	0	0	0	01	Q	PRO: Quiet
337	02	01	52	111	11	10706	S07	W21	0	0	0	02	Q	SOL: Eruptive
						10707	S17	W24	5	0	0	02	E	MAG: Quiet
						10708	N09	E14	1	1	0	02	E	PRO: Quiet
338	03	02	62	106	4	10706	S05	W26	0	0	0	03	Q	SOL: Eruptive
						10707	S14	W37	0	0	0	03	E	MAG: Quiet
						10708	N09	E01	0	1	0	03	E	PRO: Quiet
339	04	03	58	101	3	10706	S06	W48	0	0	0	04	Q	SOL: Eruptive
						10707	S14	W49	0	0	0	04	Q	MAG: Major
						10708	N08	W12	0	0	0	04	E	PRO: Warning
						10709	N06	E61	0	0	0	04	Q	
340	05	04	43	97	0	10706	S07	W62	0	0	0	05	Q	SOL: Eruptive
						10707	S13	W64	0	0	0	05	Q	MAG: Major
						10708	N09	W26	0	0	0	05	E	PRO: Warning
341	06	05	46	96	7	10706	S07	W74	0	0	0	06	Q	SOL: Quiet
						10707	S13	W77	0	0	0	06	Q	MAG: Quiet
						10708	N09	W41	0	0	0	06	Q	PRO: Quiet
						10709	N06	E31	0	0	0	06	Q	
342	07	06	47	93	18	10706	S07	W87	0	0	0	07	Q	SOL: Quiet
						10707	S13	W88	0	0	0	07	Q	MAG: Active
						10708	N10	W53	0	0	0	07	Q	PRO: Quiet
						10709	N04	E20	0	0	0	07	Q	
343	08	07	26	90	14	10708	N10	W66	0	0	0	08	Q	SOL: Eruptive
						10709	N04	E01	0	0	0	08	Q	MAG: Quiet
									0	0	0	08		PRO: Quiet
344	09	08	40	81	11	10708	N09	W81	0	0	0	09	Q	SOL: Quiet
						10709	N04	W11	1	0	0	09	Q	MAG: Quiet
						10710	S08	E47	0	0	0	09	Q	PRO: Quiet
345	10	09	39	87	9	10708	N09	W92	0	0	0	10	Q	SOL: Eruptive
						10709	N05	W21	0	0	0	10	Q	MAG: Quiet
						10710	S07	E33	1	0	0	10	Q	PRO: Quiet
346	11	10	39	85	9	10709	N05	W38	0	0	0	11	Q	SOL: Quiet
						10710	S08	E22	0	0	0	11	Q	MAG: Minor
						10711	N13	W20	0	0	0	11	Q	PRO: Quiet
347	12	11	16	90	17	10711	N13	W34	0	0	0	12	Q	SOL: Quiet
									0	0	0	12		MAG: Minor
									0	0	0	12		PRO: Quiet
348	13	12	26	91	27	10711	N13	W47	0	0	0	13	Q	SOL: Eruptive
									0	0	0	13		MAG: Quiet
									0	0	0	13		PRO: Quiet
349	14	13	22	90	12	10711	N13	W60	0	0	0	14	Q	SOL: Eruptive
									0	0	0	14		MAG: Quiet
									0	0	0	14		PRO: Quiet
350	15	14	18	89	7	10711	N13	W74	0	0	0	15	Q	SOL: Quiet
									0	0	0	15		MAG: Quiet
									0	0	0	15		PRO: Quiet
351	16	15	28	89	5	10710	S08	W46	0	0	0	16	Q	SOL: Quiet
						10711	N13	W88	0	0	0	16	Q	MAG: Quiet
									0	0	0	16		PRO: Quiet

A L E R T P E R I O D S
The International Space Environment Service

DECEMBER 2004

Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Rgn No.	Location Lat	Location Lon	Flares Opt	Flares M	Flares X	Date of Fcst	Region Fcst(1)	Geoadvice(1)
352	17	16	14	90	11	10710	S06	W61	0	0	0	17	Q	SOL: Quiet
									0	0	0	17		MAG: Active
									0	0	0	17		PRO: Quiet
353	18	17	40	90	17	10710	S07	W72	0	0	0	18	Q	SOL: Quiet
						10712	S10	E50	0	0	0	18	Q	MAG: Active
						10713	S10	E70	0	0	0	18	Q	PRO: Quiet
354	19	18	40	91	9	10710	S07	W82	0	0	0	19	Q	SOL: Quiet
						10712	S10	E37	0	0	0	19	Q	MAG: Active
						10713	S10	E59	0	0	0	19	Q	PRO: Quiet
355	20	19	29	94	3	10712	S11	E24	0	0	0	20	Q	SOL: Quiet
						10713	S10	E46	0	0	0	20	Q	MAG: Quiet
									0	0	0	20		PRO: Quiet
356	21	20	30	94	4	10713	S09	E34	0	0	0	21	Q	SOL: Eruptive
									0	0	0	21		MAG: Quiet
									0	0	0	21		PRO: Quiet
357	22	21	25	101	10	10713	S08	E22	0	0	0	22	E	SOL: Eruptive
									0	0	0	22		MAG: Quiet
									0	0	0	22		PRO: Quiet
358	23	22	47	99	18	10713	S10	E07	2	0	0	23	E	SOL: Eruptive
						10714	S04	W01	0	0	0	23	Q	MAG: Quiet
									0	0	0	23		PRO: Quiet
359	24	23	47	96	7	10713	S08	W06	0	0	0	24	Q	SOL: Eruptive
						10714	S03	W16	0	0	0	24	Q	MAG: Quiet
									0	0	0	24		PRO: Quiet
360	25	24	42	97	3	10713	S08	W21	0	0	0	25	E	SOL: Eruptive
						10714	S03	W30	0	0	0	25	Q	MAG: Quiet
									0	0	0	25		PRO: Quiet
361	26	25	26	93	14	10713	S09	W36	0	0	0	26	Q	SOL: Quiet
						10714	S03	W40	0	0	0	26	Q	MAG: Active
									0	0	0	26		PRO: Quiet
362	27	26	16	92	9	10713	S08	W47	0	0	0	27	Q	SOL: Quiet
									0	0	0	27		MAG: Quiet
									0	0	0	27		PRO: Quiet
363	28	27	11	97	7	10713	S09	W65	1	0	0	28	Q	SOL: Quiet
									0	0	0	28		MAG: Quiet
									0	0	0	28		PRO: Quiet
364	29	28	27	105	15	10713	S09	W78	5	0	0	29	Q	SOL: Eruptive
						10715	N04	E74	1	0	0	29	E	MAG: Quiet
									0	0	0	29		PRO: Quiet
365	30	29	27	99	18	10713	S09	W91	1	1	0	30	E	SOL: Eruptive
						10715	N04	E61	1	1	0	30	E	MAG: Quiet
									0	0	0	30		PRO: Quiet
366	31	30	34	100	15	10715	N04	E47	6	2	0	31	A	SOL: Active
						10716	S16	E52	0	0	0	31	A	MAG: Quiet
									0	0	0	31		PRO: Quiet

(1) Region Forecast and Flare (SOL) Advice
- Q = Quiet (<50% probability of C-class flares)
- E = Eruptive (C-class flares expected, probability >=50%)
- A = Active (M-class flares expected, probability >=50%)
- M = Major (X-class flares expected, probability >=50%)
- P = Proton (Proton flares expected, probability >=50%)
- W = Warning (activity levels are expected to increase, but no numerical forecast given)

A L E R T P E R I O D S
The International Space Environment Service

DECEMBER 2004

/ = No forecast available

Magnetic (MAG) Geoadvice

'Quiet'		
'Active'	conditions expected	(A>= 20 or K =4)
'Minor'	storm expected	(A>= 30 or K =5)
'Major'	storm expected	(A>= 50 or K>=6)
'Severe'	storm expected	(A>=100 or K>=7)
'IP'	magstorm in progress	(A>= 30 or K>=4)
'Warning'	(activity levels are expected to increase, but no numerical forecast given)	
'/'	no forecast available	

Proton (PRO) Geoadvice

'Quiet'		
'Proton'	event expected	(10pfu at > 10 MeV)
'Major'	proton event expected	(100pfu at >100 MeV)
'IP'	proton event in progress	(>10 MeV)
'Warning'	(activity levels are expected to increase, but no numerical forecast given)	
'/'	no forecast available	

STRATWARM ALERTS
Termination of the STRATALERT Reports
Stratospheric Research Group, FU Berlin

In the 1960s the stratospheric midwinter warmings were regarded as an exciting and interesting research problem. The observations taken during a warming were scarce but in great demand, and a much desired aim was to launch meteorological rockets when a warming was developing above a station. For this purpose an advisory system was necessary, such as had been established in the international geophysical community for other phenomena, the so-called GEOALERT. Charged by WMO (World Meteorological Organisation) the Stratospheric Research Group of the Freie UniversitΣt in Berlin got together with their colleagues of the American Weather Bureau and developed a warning system which was named STRATALERT. It was introduced in 1964 when the IQSY (International Year of the Quiet Sun) began (cf. ALERTING CRITERIA for more information).

The Berlin group was at first responsible for the European space, later for the whole Northern Hemisphere, and issued a STRATALERT report every day during winter, and when needed also a GEOALERT. The alerts were disseminated through the German Weather Service's international net and reached all interested parties everywhere. The STRATALERT reports were an essential source of information about what was going on in the stratosphere, information which at that time would not otherwise have been available to many scientists interested in current conditions. Because of this information it was possible to time experiments, for instance with meteorological rockets, to take place under desired conditions, and local observations could be fitted into and interpreted on the background of a wider field. This information system has served as a basis for decisions made in many large-scale field experiments. A review and classification of stratospheric warmings can be found in SPARC Newsletter No. 15, (Labitzke and Naujokat, 2000, updated table 1).

The winter, 2003/2004, was the last STRATALERT winter. After 41 years we are sorry to announce that we cannot continue this timely warning system in its old format and we could not find a successor. For those who are interested in STRATALERT messages, we provide access to all available messages via ftp: ftp://strat50.met.fu-berlin.de/pub/stratalert

Those interested in the daily development of the stratospheric circulation can find some analyses and different stratospheric parameters based on the ECMWF-data here:
http://strat-www.met.fu-berlin.de/cgi-bin/winterdiagnostics.
The general evaluation is, however, left to the user.

Additional data links are (amongst others) available:

US National Centers for Environmental Prediction (CPC/NCEP):
http://www.cpc.ncep.noaa.gov/products/stratosphere

Japan Meteorological Agency (JMA):
http://okdk.kishou.go.jp/products/clisys/STRAT